

## Title (en)

Single feed planar dual-polarization multi-loop element antenna

## Title (de)

Flache dual polarisierte Antenne mit Einzelspeisung und mehrfachem Rahmenelement

## Title (fr)

Antenne à élément à cadres multiples, double polarisation, planaire, à simple alimentation

## Publication

**EP 2276107 A3 20110518 (EN)**

## Application

**EP 10167719 A 20100629**

## Priority

US 49424609 A 20090629

## Abstract (en)

[origin: EP2276107A2] Dual polarization in an antenna structure that results from a number of radiating elements arranged in a loop configuration. The antenna structure is excited by a single coaxial feedline (118, 504, 614, 704, 804) in an interior portion of the antenna structure. The antenna structure may include a ground plane (890) that enables a directional radiation pattern (870, 872, 874, 876, 878). The antenna structure may also be operational without a ground plane to enable an omnidirectional radiation pattern (400). The antenna structure may be configured in a number of loop configurations (100, 500, 600, 700, 800) electrically connected to each other by a number of microstrip loops extending in a horizontal and vertical planar direction.

## IPC 8 full level

**H01Q 1/00** (2006.01); **H01Q 1/24** (2006.01); **H01Q 1/38** (2006.01); **H01Q 7/00** (2006.01)

## CPC (source: EP US)

**H01Q 1/242** (2013.01 - EP); **H01Q 1/246** (2013.01 - US); **H01Q 1/38** (2013.01 - EP US); **H01Q 7/00** (2013.01 - EP US); **H01Q 21/205** (2013.01 - EP US); **H01Q 21/24** (2013.01 - EP US)

## Citation (search report)

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## Designated contracting state (EPC)

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## Designated extension state (EPC)

BA ME RS

## DOCDB simple family (publication)

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## DOCDB simple family (application)

**EP 10167719 A 20100629**; CA 2708731 A 20100629; US 49424609 A 20090629